

Table 1 Response rates by age and method of recruitment

	18–22 years No (%)	23–27 years No (%)	28–32 years No (%)	Total No (%)
Group 1 Mail and telephone:				
Number	26 (100)	21 (100)	18 (100)	65 (100)
Agreed to participate	14 (54)	14 (67)	7 (39)	35 (54)
Urine provided	10 (38)	12 (57)	7 (39)	29 (45)
Group 2 Mail:				
Number	16 (100)	26 (100)	27 (100)	69 (100)
Agreed to participate	2 (13)	6 (23)	8 (30)	16 (23)
Urine provided	2 (13)	5 (19)	7 (26)	14 (20)
Total	12 (29)	17 (36)	14 (31)	43 (32)

were treated with azithromycin through their nominated doctor.

Participants provided 20 ml first void urine in the container provided. Specimens were tested for chlamydia by polymerase chain reaction.

Telephone numbers were found for 70 (47%) women. Among women in group 1, five (7%) were excluded because they were living overseas. Of the remaining 65 women, 35 (54%, 95% CI 41 to 66) agreed to participate and 29 (45%, 95% CI 32 to 57) provided a specimen. One case of chlamydia was diagnosed giving a prevalence of 3.4% (95% CI 0.1 to 17.8) in this group (table 1). Among women in group 2, 11 (14%) were excluded because they were not living at their registered address. Of the remaining 69 women, 16 (23%, 95% CI 14 to 35) agreed to participate and 14 (20%, 95% CI 12 to 32) provided a specimen. No cases of chlamydia were diagnosed.

In this pilot study we showed recruitment via mail and telephone had a significantly higher response than mail alone (45% v 20%, $p=0.002$). This suggests that telephone communication will increase response in population based chlamydia research that uses mail contact as the principal recruitment tool. Although the method of recruitment was not randomly allocated, the 25% difference in response is unlikely to be explained by differences between the two groups.

A response rate of 45% for those recruited via mail and telephone compares well with results obtained in similar overseas studies.^{2–4} However, unlike our study that used the electoral roll as the sampling frame, these studies used a primary healthcare sampling frame, not available in Australia. As we were only able to locate telephone numbers for 47%, an alternative sampling frame would be necessary for future research using mailed, self collected specimens.

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Contributors

JH, conducted the pilot study and drafted the letter; ST, conception and design particularly with reference to specimen collection and conducted all chlamydia testing; DJ, conception and design particularly with reference to population sampling and statistical methods and reviewed and made revisions to the letter; SG, conception and design of study, assisted with the ethics application and reviewed and made revisions to the letter; CF, conception and design, assisted with the ethics application and revised letter critically for important intellectual content.

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Which factors affect access to STD care? A comparison of a hospital based clinic and an outreach service

The national strategy for sexual health and HIV recommends that genitourinary medicine (GUM) outreach services be used as a means of expanding patient access to testing and advice for STDs.¹ However, there is limited published work to demonstrate the effectiveness of outreach services in GUM.^{2,3} Having established an outreach GUM service in 1997 we reported initial data in 1998⁴ and now we report a more in-depth examination of the factors that affect access to care and a further evaluation of the differences between patients attending the outreach and main clinics.

The Patrick Clements Clinic is a long established hospital based GUM clinic (about 16 000 attendances per year) in north west London. It offers a daily, weekday, open access, walk-in service. The Windsor Clinic (WC) is an outreach GUM service based at a GP practice building in Wembley. It opens one afternoon a week with mixed appointment and walk-in slots, staffed by a consultant and a nurse.

Fifty five patients were interviewed at the two study sites: 35 at the main clinic and 20 at the outreach clinic. The taped interviews were later analysed to look for themes. Demographic and disease data were also analysed from consecutive attendees for a week at the hospital clinic and 6 months at the outreach clinic using the clinic database. Data were compared with the previously published study.⁴ Differences were tested with the χ^2 test.

The most notable differences between interviewees were the higher rate of previous GUM attendance, 28/35 (80%) v 5/20 (25%),

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Table 1 Comparison of demographic and disease data on patients attending the two clinics in 2001 and significant data from the 1998 survey

Variable	Hospital clinic patients (209) No (%)	Outreach clinic patients (111) No (%)	Outreach clinic data (95) 1998 ⁴
Ethnicity			
Asian	11 (5)	5 (5)	17 (17.4)**
Black British/Caribbean	77 (37)	48 (43)	
White	54 (26)	23 (21)	
African	14 (7)	18 (16)*	
First time attendees	72 (34)	66 (59)*	
Women	107 (51)	75 (68)*	
Men	102 (49)	36 (32)*	
Median age	28	26	26**
Age <20 years	22 (11)	21 (19)*	19 (20)**
Disease			
Gonorrhoea	7 (3)	5 (5)	
Chlamydia	12 (6)	9 (8)	
Trichomoniasis (female)	4 (4)	1 (1)	
NGU (male)	15 (15)	3 (8)	
Genital herpes	5 (2)	0	
Genital warts	12 (6)	3 (3)	
HIV test	64 (31)	30 (27)	27 (28)**

* $p<0.05$, outreach v hospital clinic patients for 2001 data.

** $p<0.05$, 95 outreach v 105 hospital clinic patients, data collected in 1998 for both.⁴

and greater numbers with casual partners, 14/35 (40%) v 1/20 (5%), in those attending the hospital based clinic compared with outreach patients. Interviewees reported that location played an important part in their decision as to which site to attend as 46/55 (83%) attended the clinic that was closest to home or work. Lack of awareness of alternative clinics did not seem to be a significant factor influencing the site attended, as 34/55 (62%) were aware of alternatives. Confidentiality and stigma were not stated as important issues.

Demographic and disease data on 209 consecutive attendees at the hospital based clinic and 111 consecutive attendees at the outreach clinic in 2001 were compared (table 1). The data show that outreach patients were more likely to be teenagers, women, African, and first time clinic attendees. STD rates were similar at both sites. These data are similar to those obtained in 1998 although the ethnic mix has changed.

It has long been assumed that stigma and confidentiality were the main influences on patient access to GUM services and ever since the Monk report there has been a move towards overcoming these barriers.⁵ This study shows that the outreach service attracted a new and very different population, in terms of demographics and GUM experience, but the overriding influence on the patients' choice of site of care was closeness to home or work. However, outreach services such as this are also relatively time consuming and expensive compared with the larger clinic. These factors should be strongly considered when developing new outreach services.

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Clearance of HPV infection in middle aged men and women after 9 years' follow up

The age prevalence of human papillomavirus (HPV) cervical infections is high in young age groups, declining sharply thereafter, reaching a steady state after age 40.¹ Women who

Table 1 HPV detection in women and men at entry and at follow up time

	Spain	Colombia	Brazil	All
Women:				
HPV status at entry				
Negative	13	31	35	79
Positive	3	5*	12	20
HPV status at follow up				
Negative	16	36	47	99
Positive	0	0	0	0
Men:				
HPV status at entry				
Positive	9	5	—	14
HPV status at follow up				
Positive	1**	1***	—	2
Negative	8	4	—	12

*One women was positive for a low risk HPV DNA, **HPV 6, ***HPV 16.

remain persistent carriers of HPV DNA are considered at high risk for cervical cancer. To investigate viral persistence over an extended period of time, we re-contacted, in 1997-8, a group of women who participated in case-control studies between 1988-91 in Spain, Colombia, and Brazil.²⁻⁴ Among women with confirmed normal cervical smears, follow up was scheduled for all women positive for HPV cervical detection (n=91) and for a group of age matched women who were HPV negative (n=254). All but one HPV infection were of high risk types. Husbands of these women in Colombia and in Spain, initially detected to be HPV positive (n=110), were also re-contacted. Follow up data were obtained from personal interview and from HPV DNA tested in cervical and urethral (men) exfoliated cells. The follow up protocol was approved by the institution's ethics committee and participants signed an informed consent. Finally, 198 women (57.4%) and 42 (38.2%) men were re-interviewed. Of them, 99 women provided cervical samples and 14 men provided urethral samples. HPV detection was carried out in the same laboratories that tested the initial samples. The Spanish and Colombian samples were tested using the PMY09/11 PCR L1 based method and the Brazilian samples were tested using the GP5+/6+ PCR system.

The average age at entry was 50.8 years for women and 51.9 for men (range 27-79 years). After an average of 9 years of follow up (range 7-11), none of the women examined harboured HPV DNA irrespective of their initial HPV status (table 1). The follow up cervical smear identified three women in Colombia and one in Brazil with a cervical intraepithelial neoplasm grade I. All were HPV negative. Among the HPV positive husbands who were re-examined, two remained positive (14.3%, 95% CI 3.7 to 32.6), one for low risk type HPV 6 and one for high risk type HPV 16. No penile lesions were detected upon clinical examination. An active search in the corresponding cancer registries did not identify any case of invasive cervical or penile cancer in the target population.

The data, albeit limited by small size, suggest that HPV infection in middle age is subject to clearance as is commonly observed in young women.⁴ All women with follow up information had no HPV infection after an average follow up period of 9 years. None of the women developed advanced cervical disease in the interval as would be expected in some cases of chronic carriers of HPV infection.

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